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EXAMINER

BELL, MELTIN

ART UNIT PAPER NUMBER

2129

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,203

Applicant(s)

BIGUS ET AL.

Examiner

Meltin Bell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-104 is/are pending in the application.
- 4a) Of the above claim(s) 34-56, 58-92 and 94-104 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33, 57 and 93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **10/021,203** filed 10/30/2001 as well as the Amendment filed 2/10/05. Claims 1-33, 57 and 93 filed by the applicant have been entered and examined. Claims 34-56, 58-92 and 94-104 have been canceled. An action on the merits of claims 1-33, 57 and 93 appears below.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 31-33 and 57 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims (e.g. "signal bearing medium", "transmission medium", "distributing", "intelligent agent", "operational condition") raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. For example, if claim 57 was amended to recite a computer-implemented method, it will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Claim Rejections - 35 USC § 103

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Applicant's arguments have been considered, but are moot in view of new grounds of rejection. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Office to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10, 12-16, 18-29, 31-32 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chefalas et al* USPN 6,785,834 "Method and

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system for automating product support" (Filed Mar. 21, 2001) in view of *Mikurak* USPN 6,671,818 "Problem isolation through translating and filtering events into a standard object format in a network based supply chain" (Filed Nov. 22, 1999).

Regarding claim 1:

Chefalas et al teaches,

- (a) first and second product support agents (column 4, lines 4-25, "FIG. 2 illustrates system architecture ... or more products") configured to perform product support operations in connection with a computer-related product (column 1, lines 16-19, "The present invention ... a communication network"), wherein at least one of the first and second product support agents is configured to perform at least one of a product support operation that identifies an undesirable operational condition associated with the computer-related product and a product support operation that remedies an undesirable operational condition associated with the computer-related product
- (b) a first agent platform configured to execute on a customer computer that utilizes the computer-related product (Abstract, "According to the ... the computing device")
- (c) a product support program resident on a product support computer used in providing product support for the computer-related product, the product support program including a second agent platform, and the product support program configured to dispatch the first product support agent to the customer computer for execution by the first agent platform, and to initiate execution of the second

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product support agent by the second agent platform (column 5, lines 29-65, "Now referring back ... diagnosing the problem")

However, *Chefalas et al* doesn't explicitly teach the first and second product support agents are intelligent agents while *Mikurak* teaches,

- An apparatus (Detailed Description text, paragraph 970, "The web customer ... resolve the complaints"), comprising: the first and second product support agents are intelligent agents (Detailed Description text, paragraph 1250, "On the Internet ... information will grow")

Motivation - The portions of the claimed apparatus would have been a highly desirable feature in this art for diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414, "In systems according ... product support techniques"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Chefalas et al* as taught by *Mikurak* for the purpose of resolving problems.

Regarding claim 2:

The rejection of claim 2 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 3:

The rejection of claim 3 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 3's limitations difference is taught in *Chefalas et al*:

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- the first product support intelligent agent is configured to execute on either the first or second agent platforms (column 5, lines 29-65, "Now referring back ... diagnosing the problem")

Regarding claim 4:

The rejection of claim 4 is similar to that for claims 1 and 3 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 5:

The rejection of claim 5 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 5's limitations difference is taught in *Mikurak*:

- the computer-related product comprises at least one of an internal software component, an internal hardware component, an external software component and an external hardware component associated with the customer computer (Detailed Description text, paragraphs 1023-1024, "Application Proxy Services ... could be provided")

Regarding claim 6:

The rejection of claim 6 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 7:

The rejection of claim 7 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 7's limitations difference is taught in *Mikurak*:

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- the first product support intelligent agent is configured to collect operational data associated with the computer-related product (Detailed Description text, paragraph 246 "Mediation and activity ... an event occur")

Chefalas et al.:

- wherein the second product support intelligent agent is configured to analyze the operational data collected by the first product support intelligent agent to identify an undesirable operational condition for the computer-related product (Abstract, "According to the ... the computing device")

Regarding claim 8:

The rejection of claim 8 is similar to that for claim 7 as recited above since the stated limitations of the claim are set forth in the references. Claim 8's limitations difference is taught in *Chefalas et al.*:

- the product support program is further configured to dispatch a remedy intelligent agent to remedy the undesirable operational condition (Abstract, "According to the ... the computing device")

Regarding claim 9:

The rejection of claim 9 is similar to that for claim 8 as recited above since the stated limitations of the claim are set forth in the references. Claim 9's limitations difference is taught in *Mikurak*:

- creating the remedy intelligent agent (Detailed Description text, paragraphs 1255-1257, "A business may ... own items competitively")

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- the product support program is further configured to create (Abstract, "According to the ... the computing device") the remedy intelligent agent

Regarding claim 10:

The rejection of claim 10 is similar to that for claim 9 as recited above since the stated limitations of the claim are set forth in the references. Claim 10's limitations difference is taught in *Mikurak*:

- the product support program is further configured to publish the remedy intelligent agent (Detailed Description text, paragraph 663, "As illustrated in FIG. 53A ... forms in operation 6614") with a distribution control that limits distribution of the remedy intelligent agent (Detailed Description text, paragraph 998, "WAF can protect ... can be performed")

Regarding claim 12:

The rejection of claim 12 is similar to that for claim 8 as recited above since the stated limitations of the claim are set forth in the references. Claim 12's limitations difference is taught in *Mikurak*:

- the product support program is configured to dispatch the remedy intelligent agent between product releases of the computer-related product (Detailed Description text, paragraphs 49-51, "FIG. 5 is a schematic illustration ... a critical differentiator"; Detailed Description text, paragraphs 751-752, "Staging and Deployment ... of the content"; Detailed Description text, paragraphs 1232-1233, "Web Application Staging ... and the like")

Regarding claim 13:

The rejection of claim 13 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 13's limitations difference is taught in *Mikurak*:

- the second product support intelligent agent is configured to collect operational data (Detailed Description text, paragraph 234 "The Network Data ... standard service commitments") from the customer computer while resident on the product support computer

Regarding claim 14:

The rejection of claim 14 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 14's limitations difference is taught in *Mikurak*:

- the customer computer and the product support computer are coupled to one another over the Internet (Detailed Description text, paragraphs 415-417, "In addition, one ... 900 billing cycles")

Regarding claim 15:

The rejection of claim 15 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 15's limitations difference is taught in *Chefalas et al.*:

- a cross-customer knowledge base (column 4, lines 4-25, "FIG. 2 illustrates system ... or more products") including operational data (column 8, lines 1-38, "At step 410, after ... with regard to FIG. 3") associated with a plurality of customers (column 6, lines 25-41, "With further reference ... exits at step 326")

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wherein the second product support intelligent agent is configured to analyze the operational data stored in the cross-customer knowledge base to identify an undesirable operational condition in the computer-related product

Regarding claim 16:

The rejection of claim 16 is similar to that for claim 15 as recited above since the stated limitations of the claim are set forth in the references. Claim 16's limitations difference is taught in *Mikurak*:

- the second product support intelligent agent is configured to analyze the operational data using logic selected from the group consisting of neural network logic, fuzzy logic, pattern matching logic, script logic, and combinations thereof (Detailed Description text, paragraph 377, "FIG. 46 is a block ... network event views")

Regarding claim 18:

Chefalias et al teaches,

- (a) dispatching a first product support agent (column 5, lines 29-65, "Now referring back ... diagnosing the problem") from a product support (column 1, lines 16-19, "The present invention ... a communication network") computer to a customer computer to execute on a first agent platform resident on the customer computer to perform a first product support operation associated with the computer-related product (Abstract, "According to the ... the computing device")
- (b) a computer implemented step of executing a second product support agent (column 4, lines 4-25, "FIG. 2 illustrates system architecture ... or more products") on a second agent platform resident on the product support computer

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to perform a second product support operation associated with the computer-related product, wherein at least one of the first and second product support agents is configured to perform at least one of a product support operation that identifies an undesirable operational condition associated with the computer-related product and a product support operation that remedies an undesirable operational condition associated with the computer-related product

However, *Chefalas et al* doesn't explicitly teach the first and second product support agents are intelligent agents while *Mikurak* teaches,

- A method (Abstract, "A system, method ... the network assets"; Fig. 1) of providing product support (Detailed Description text, paragraph 414, "In systems according ... product support techniques") for a computer-related product (Detailed Description text, paragraph 989, "In addition, WAF ... other financial activities"), the method comprising: the first and second product support agents are intelligent agents (Detailed Description text, paragraph 1250, "On the Internet ... information will grow")

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414, "In systems according ... product support techniques"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Chefalas et al* as taught by *Mikurak* for the purpose of resolving problems.

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Regarding claim 19:

The rejection of claim 19 is the same as that for claim 18 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 20:

The rejection of claim 20 is the same as that for claim 18 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 21:

The rejection of claim 21 is the same as that for claims 18 and 7 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 22:

The rejection of claim 22 is the same as that for claims 21 and 8 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 23:

The rejection of claim 23 is the same as that for claims 22 and 9 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 24:

The rejection of claim 24 is the same as that for claims 23 and 10 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 25:

The rejection of claim 25 is the same as that for claims 22 and 12 as recited above since the stated limitations of the claim are set forth in the references.

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Regarding claim 26:

The rejection of claim 26 is the same as that for claims 18 and 13 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 27:

The rejection of claim 27 is the same as that for claims 18 and 14 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 28:

The rejection of claim 28 is the same as that for claims 18 and 15 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 29:

The rejection of claim 29 is the same as that for claims 28 and 16 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 31:

Chefalas et al teaches,

- (a) first and second product support agents (column 4, lines 4-25, "FIG. 2 illustrates system architecture ... or more products") configured to perform product support operations in connection with a computer-related product, wherein at least one of the first and second product support intelligent agents is configured to perform at least one of a product support operation that identifies an undesirable operational condition associated with the computer-related product and a product support operation that remedies an undesirable operational condition associated with the computer-related product (column 1, lines 16-19, "The present invention ... a communication network")

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- (b) a first agent platform configured to execute on a customer computer that utilizes the computer-related product (Abstract, "According to the ... the computing device")

- (c) a product support program configured to reside on a product support computer used in providing product support for the computer-related product, the product support program including a second agent platform, and the product support program configured to dispatch the first product support agent to the customer computer for execution by the first agent platform, and to initiate execution of the second product support agent by the second agent platform (column 5, lines 29-65, "Now referring back ... diagnosing the problem")

However, *Chefalas et al* doesn't explicitly teach the first and second product support agents are intelligent agents and (d) at least one computer-readable signal bearing medium bearing the first and second product support agents, the first agent platform, and the product support program while *Mikurak* teaches,

- A method (Abstract, "A system, method ... the network assets"; Fig. 1) of providing product support (Detailed Description text, paragraph 414, "In systems according ... product support techniques") for a computer-related product (Detailed Description text, paragraph 989, "In addition, WAF ... other financial activities"), the method comprising: the first and second product support agents are intelligent agents (Detailed Description text, paragraph 1250, "On the Internet ... information will grow")

- (d) at least one computer-readable signal bearing medium bearing the first and second product support agents, the first agent platform, and the product support

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program (Detailed Description text, paragraph 97, "Additionally, the order ... by the computer")

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414, "In systems according ... product support techniques"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Chefalas et al* as taught by *Mikurak* for the purpose of resolving problems.

Regarding claim 32:

The rejection of claim 32 is similar to that for claim 31 as recited above since the stated limitations of the claim are set forth in the references. Claim 32's limitations difference is taught in *Mikurak*:

- the signal bearing medium includes at least one of a transmission medium (Detailed Description text, paragraph 63, "In contrast to ... as an OC") or a recordable medium (Detailed Description text, paragraph 68, "The method and ... approach is required")

Regarding claim 93:

Chefalas et al teaches,

- A computer-implemented method of providing product support for a computer-related product (column 1, lines 16-19, "The present invention ... a communication network"), the method comprising:
 - (a) executing a first agent (column 5, lines 29-65, "Now referring back ... diagnosing the problems") to perform a first task associated with remedying an

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undesirable operational condition associated with a customer computer that utilizes the computer-related product (Abstract, "According to the ... the computing device"; column 4, lines 4-25, "FIG. 2 illustrates system architecture ... or more products")

However, *Chefalas et al* doesn't explicitly teach the first agent is a first intelligent agent, the first intelligent agent is provided by a first vendor that supplies a first component associated with the computer-related product or (b) executing a second intelligent agent to perform a second task associated with remedying the undesirable operational condition, wherein the second intelligent agent is provided by a second vendor that supplies a second component associated with the computer-related product while *Mikurak* teaches,

- A computer-implemented method (Abstract, "A system, method ... the network assets"; Fig. 1) of providing product support for a computer-related product (Detailed Description text, paragraph 989, "In addition, WAF ... other financial activities"), the method comprising:

- the first agent is a first intelligent agent (Detailed Description text, paragraph 1250, "On the Internet ... information will grow")
- the first intelligent agent is provided by a first vendor that supplies a first component associated with the computer-related product (Detailed Description text, paragraphs 1495-1496, "In the sample ... and other customers")
- (b) executing a second intelligent agent (Detailed Description text, paragraphs 1252-1263, "Despite the vast ... be executed remotely") to perform a second task associated with remedying the undesirable operational condition (Detailed

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Description text, paragraphs 973-974, "Proactive Service Notification ... changes or downloads"), wherein the second intelligent agent is provided by a second vendor (Detailed Description text, paragraph 998, "WAF can protect ... can be performed") that supplies a second component associated with the computer-related product (Detailed Description text, paragraphs 1159-1160, "Such aggregation, in ... user actually uses")

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414, "In systems according ... product support techniques"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Chefalas et al* as taught by *Mikurak* for the purpose of resolving problems.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Chefalas et al* in view of *Mikurak* in view of *Sim et al* "Simulation of a multi-agent protocol for task allocation in cooperative design" (12-15 Oct. 1999) and in further view of *Nonogaki et al* "FRIEND21 project: a construction of 21st century human interface" (March 1991).

Regarding claim 11:

Chefalas et al teaches,

- (a) first and second product support agents (column 4, lines 4-25, "FIG. 2 illustrates system architecture ... or more products") configured to perform product support operations in connection with a computer-related product

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(column 1, lines 16-19, "The present invention ... a communication network"), wherein at least one of the first and second product support agents is configured to perform at least one of a product support operation that identifies an undesirable operational condition associated with the computer-related product and a product support operation that remedies an undesirable operational condition associated with the computer-related product

- (b) a first agent platform configured to execute on a customer computer that utilizes the computer-related product (Abstract, "According to the ... the computing device")

- (c) a product support program resident on a product support computer used in providing product support for the computer-related product, the product support program including a second agent platform, and the product support program configured to dispatch the first product support agent to the customer computer for execution by the first agent platform, and to initiate execution of the second product support intelligent agent by the second agent platform (column 5, lines 29-65, "Now referring back ... diagnosing the problem")

- the second product support agent is configured to analyze the operational data collected by the first product support agent to identify an undesirable operational condition for the computer-related product (Abstract, "According to the ... the computing device")

- the product support program is further configured to dispatch a remedy agent to remedy the undesirable operational condition (Abstract, "According to the ... the computing device")

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However, *Chefalas et al* doesn't explicitly teach the remedy, first and second product support agents are intelligent agents while *Mikurak* teaches,

- An apparatus (Detailed Description text, paragraph 970, "The web customer ... resolve the complaints"), comprising: the remedy, first and second product support agents are intelligent agents (Detailed Description text, paragraph 1250, "On the Internet ... information will grow")

- the first product support intelligent agent is configured to collect operational data associated with the computer-related product (Detailed Description text, paragraph 246 "Mediation and activity ... an event occur")

Sim et al teaches,

- the product support program is further configured to select the remedy agent (page III-95, section 2, paragraph 1, "In this research ... decentralized design tasks") from among a plurality of existing remedy agents (page III-96, section 4, paragraph 1, "When an agent ... have experience in" and page III-97, left column, paragraph 1, "carrying out similar ... of the protocol")

Nonogaki et al teaches,

- the product support program is further configured to select the intelligent agent from among a plurality of existing agents (page 410, right column, Distributed Cooperative Architecture section, paragraph 1, "The logical structure ... user's activity and" and page 411, left column, paragraph 1, "determine the user's ... in distant places")

Motivation - The portions of the claimed apparatus would have been a highly desirable feature in this art for diagnosing and resolving problems (*Mikurak*,

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Detailed Description text, paragraph 414, "In systems according ... product support techniques") as well as ensuring effective resource allocation and focused decision (*Sim et al*, Abstract, "To achieve high ... the proposed protocol") and scattering the intelligence among multiple agents (*Nonogaki et al*, page 411, left column, paragraph 2, "The intelligent behavior ... the system designer"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Chefalas et al* as taught by *Mikurak*, *Sim et al* and *Nonogaki et al* for the purpose of resolving problems, ensuring effective resource allocation/focused decision and scattering the intelligence among multiple agents.

Claims 17, 30, 33 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chefalas et al* in view of *Mikurak* and in further view of *Cheng et al* USPN 6,151,643 "Automatic updating of diverse software products on multiple client computer systems by downloading scanning application to client computer and generating software list on client computer" (Nov. 21, 2000).

Regarding claim 17:

Chefalas et al teaches,

- (a) first and second product support agents (column 4, lines 4-25, "FIG. 2 illustrates system architecture ... or more products") configured to perform product support operations in connection with a computer-related product (column 1, lines 16-19, "The present invention ... a communication network"), wherein at least one of the first and second product support agents is configured

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to perform at least one of a product support operation that identifies an undesirable operational condition associated with the computer-related product and a product support operation that remedies an undesirable operational condition associated with the computer-related product

- (b) a first agent platform configured to execute on a customer computer that utilizes the computer-related product (Abstract, "According to the ... the computing device")

- (c) a product support program resident on a product support computer used in providing product support for the computer-related product, the product support program including a second agent platform, and the product support program configured to dispatch the first product support agent to the customer computer for execution by the first agent platform, and to initiate execution of the second product support agent by the second agent platform (column 5, lines 29-65, "Now referring back ... diagnosing the problem")

However, *Chefalas et al* doesn't explicitly teach the first and second product support agents are intelligent agents or the first and second product support intelligent agents are associated with different vendors while *Mikurak* teaches,

- An apparatus (Detailed Description text, paragraph 970, "The web customer ... resolve the complaints"), comprising: the first and second product support agents are intelligent agents (Detailed Description text, paragraph 1250, "On the Internet ... information will grow")

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- the first and second product support intelligent agents are associated with different vendors (Detailed Description text, paragraphs 1041-1042, "Secure WAF hardware ... information is enforced")

Cheng et al teaches,

- the first and second product support intelligent agents are associated with different vendors (Abstract, "A system and ... by the user")

Motivation - The portions of the claimed apparatus would have been a highly desirable feature in this art for diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414, "In systems according ... product support techniques") and automatically updating software products from diverse software vendors on a plurality of end-user, client computer systems (*Cheng et al*, Brief Summary text, paragraph 3, "The present invention ... client computer systems"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Chefalias et al* as taught by *Mikurak* and *Cheng et al* for the purpose of resolving problems and automatically updating software products from diverse software vendors on a plurality of end-user, client computer systems.

Regarding claim 30:

The rejection of claim 30 is the same as that for claims 18 and 17 as recited above since the stated limitations of the claim are set forth in the references.

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Regarding claim 33:

Chefalas et al teaches,

- A method of providing product support for a computer-related product (column 1, lines 16-19, "The present invention ... a communication network"), the method comprising:

- (a) collecting operational data (column 8, lines 1-38, "At step 410, after ... with regard to FIG. 3") from a plurality of customer computers (Fig. 2; column 1, lines 55-62, "In an effort ... common technical problems"; column 6, lines 25-41, "With further reference ... exits at step 326") that utilize the computer-related product during operation of the plurality of customer computers

- (b) identifying an undesirable operational condition associated with the computer-related product from the collected operational data (Abstract, "According to the ... the computing device"; column 4, lines 4-25, "FIG. 2 illustrates system architecture ... or more products"), wherein the identified undesirable operational condition includes a technical problem (column 1, lines 55-62, "In an effort ... common technical problems") resulting in at least one of incorrect and non-optimal operation of at least one customer computer

- (d) distributing the product support (Abstract, "According to the ... the computing device") agent to at least first and second customer computers from the plurality of customer computers (column 6, lines 25-41, "With further reference ... exits at step 326") to remedy the undesirable operational condition in the first and second customer computers, wherein at least one of collecting operational data, identifying the undesirable condition, creating the product

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support agent and distributing the product support agent is computer-implemented

- (c) creating a product support intelligent agent configured to remedy the undesirable operational condition (Abstract, "According to the ... the computing device")

However, *Chefalas et al* doesn't explicitly teach the first and second agents are intelligent and while *Mikurak* teaches,

- A method (Abstract, "A system, method ... the network assets"; Fig. 1) of providing product support (Detailed Description text, paragraph 414, "In systems according ... product support techniques") for a computer-related product (Detailed Description text, paragraph 989, "In addition, WAF ... other financial activities"), the method comprising: the first and second product support agents are intelligent agents (Detailed Description text, paragraph 1250, "On the Internet ... information will grow")

- (c) creating a product support intelligent agent configured to remedy the undesirable operational condition (Detailed Description text, paragraphs 1255-1257, "A business may ... own items competitively")

- a plurality of customer computers (Detailed Description text, paragraph 1463, "FIG. 109 illustrates a ... DAF, found above")

Cheng et al teaches,

- a plurality of customer computers (Brief Summary text, paragraph 3, "The present invention ... client computer systems")

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Motivation - The portions of the claimed method would have been a highly desirable feature in this art for diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414, "In systems according ... product support techniques") and automatically updating software products from diverse software vendors on a plurality of end-user, client computer systems (*Cheng et al*, Brief Summary text, paragraph 3, "The present invention ... client computer systems"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Chefalas et al* as taught by *Mikurak* and *Cheng et al* for the purpose of resolving problems and automatically updating software products from diverse software vendors on a plurality of end-user, client computer systems.

Regarding claim 57:

Chefalas et al teaches,

- A method of providing product support for a computer-related product (column 1, lines 16-19, "The present invention ... a communication network"), the method comprising:
 - (a) collecting operational data (column 8, lines 1-38, "At step 410, after ... with regard to FIG. 3") from a plurality of customer computers (Fig. 2; column 1, lines 55-62, "In an effort ... common technical problems"; column 6, lines 25-41, "With further reference ... exits at step 326") that utilize the computer-related product during operation of the plurality of customer computers
 - (b) analyzing the operational data from the plurality of customer computers (Abstract, "According to the ... the computing device") using at least one agent

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- (c) identifying as a result of the analysis an undesirable operational condition associated with the computer-related product in at least one of the customer computers (column 4, lines 4-25, "FIG. 2 illustrates system architecture ... or more products")

However, *Chefalas et al* doesn't explicitly teach using at least one intelligent agent while *Mikurak* teaches,

- A method (Abstract, "A system, method ... the network assets"; Fig. 1) of providing product support (Detailed Description text, paragraph 414, "In systems according ... product support techniques") for a computer-related product (Detailed Description text, paragraph 989, "In addition, WAF ... other financial activities"), the method comprising: (b) analyzing the operational data (Detailed Description text, paragraph 377, "FIG. 46 is a block ... network event views") from the customer computers using at least one intelligent agent (Detailed Description text, paragraph 1250, "On the Internet ... information will grow")

- a plurality of customer computers (Detailed Description text, paragraph 1463, "FIG. 109 illustrates a ... DAF, found above")

Cheng et al teaches,

- a plurality of customer computers (Brief Summary text, paragraph 3, "The present invention ... client computer systems")

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414, "In systems according ... product support techniques") and automatically updating software products from diverse

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software vendors on a plurality of end-user, client computer systems (*Cheng et al*, Brief Summary text, paragraph 3, "The present invention ... client computer systems"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Chefalas et al* as taught by *Mikurak* and *Cheng et al* for the purpose of resolving problems and automatically updating software products from diverse software vendors on a plurality of end-user, client computer systems.

RESPONSE TO APPLICANTS' AMENDMENT REMARKS

Applicant argues that no new matter was added in the amendments of claims 1, 18, 31, 33 and 93 (Amendment REMARKS page 11, paragraph 3).

Claim Rejections - 35 USC § 101

Applicant argues that the amendments to claims 18, 33 and 93 warrant withdrawal of the 35 USC 101 rejections (Amendment REMARKS page 11, last paragraph and page 12, paragraph 1). Applicant's arguments have been fully considered and are persuasive. The 35 USC 101 rejections of claims 18, 33 and 93 are withdrawn. However, claim 57 is rejected under 35 USC 101 since the language of the claim (e.g. "intelligent agent", "operational condition") raises a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a

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practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter.

Claim Rejections - 35 USC § 102 and 35 USC § 103

Applicant argues that *Bigus et al* USPN 6,192,354 does not specifically disclose claim 1's performance of product support operations by product support intelligent agents, the specific execution and dispatch of product support intelligent agents respectively on a product support computer and a customer computer or product support operations that either identify or remedy undesirable operational conditions associated with computer-related products (Amendment REMARKS page 13, paragraphs 3-4) and that *Bigus et al* does not disclose particular features of claims 18 and 31 that are similar to those in claim 1 (Amendment REMARKS page 15, paragraph 2). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection.

The examiner agrees that *Bigus et al* does not disclose the product support functionality of the subject application. However, *Chefalas et al* USPN 6,785,834 column 1, lines 16-19, column 4, lines 4-25, column 5, lines 29-65 and the Abstract are cited individually and in combination with *Mikurak* USPN 6,671,818 Detailed Description text, paragraphs 970 and 1250 for explicitly and inherently teaching the invention of claim 1. Further, the purpose and motivation for modifying *Chefalas et al* as taught by other references includes diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414).

Applicant argues that *Bigus et al* and *Stidolph* "Evolutionary design of complex software (EDCS) demonstration days 1999" are not directed to product support, collecting operational data from multiple customer computers, distributing agents to multiple customer computers, addressing operational conditions that include a technical problem resulting in at least one of incorrect and non-optimal operation of at least one customer computer (Amendment REMARKS page 16, paragraphs 2-3 and page 17, paragraph 1), that one of ordinary skill in the art would not be motivated to modify *Bigus et al* to practice the features recited in claim 33 (Amendment REMARKS page 17, paragraph 2) that *Bigus et al* and *Kohn et al* USPN 6,088,689 similarly fall short of teaching each and every limitation of claim 57 (Amendment REMARKS page 18, paragraph 2) and that *Bigus et al* in combination with *Stidolph* fails to teach each and every limitation of claim 93 (Amendment REMARKS page 19, paragraph 4). Applicant's arguments have been fully considered, but are moot in view of new grounds of rejection.

The examiner agrees that *Bigus et al*, *Stidolph* and *Kohn et al* do not disclose the product support functionality of claims 33, 57 and 97. However, *Chefalas et al* USPN 6,785,834 Fig. 2, column 1, lines 16-19, column 1, lines 55-62, column 4, lines 4-25, column 5, lines 29-65, column 6, lines 25-41, column 8, lines 1-38, and the Abstract are cited individually and in combination with *Mikurak* Fig. 1, Detailed Description text, paragraphs 414, 970, 973-974, 989, 998, 1159-1160, 1250, 1255-1257, 1252-1263, 1463, 1495-1496, the Abstract and *Cheng et al* USPN 6,151,643 Brief Summary text, paragraph 3 for explicitly and inherently

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teaching the invention of claims 33, 57 and 93. Further, the purpose and motivation for modifying *Chefalas et al* as taught by other references includes diagnosing and resolving problems (*Mikurak*, Detailed Description text, paragraph 414) and automatically updating software products from diverse software vendors on a plurality of end-user, client computer systems (*Cheng et al*, Brief Summary text, paragraph 3).

As set forth above with regards to *Chefalas et al*, *Mikurak* and *Cheng et al*, the items listed explicitly and inherently teach each element of the applicants' claimed limitations. Applicants have not set forth any distinction or offered any dispute between the claims of the subject application, *Chefalas et al*'s Method and system for automating product support, *Mikurak*'s Problem isolation through translating and filtering events into a standard object format in a network based supply chain and *Cheng et al*'s Automatic updating of diverse software products on multiple client computer systems by downloading scanning application to client computer and generating software list on client computer.

Conclusion

The following prior art made of record is considered pertinent to applicant's disclosure:

- *Bereiter et al*; USPN 6,145,096; Method, system and computer program product for iterative distributed problem solving
- *Sullivan et al*; USPN 6,694,314; Technical support chain automation with guided self-help capability via a system-supplied search string

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Any inquiry concerning this communication or earlier communications from the Office should be directed to Meltin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:00 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MB / *qmu.v.*
April 25, 2005


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